

# HEARING LOOP SYSTEMS in an AIRPORT ENVIRONMENT

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# FIVE FACTS on HEARING LOSS \* ---

- 20% Americans
- 30% 65 and older
- 50% 75 and older
- 20 % teens
- 3<sup>rd</sup> most common

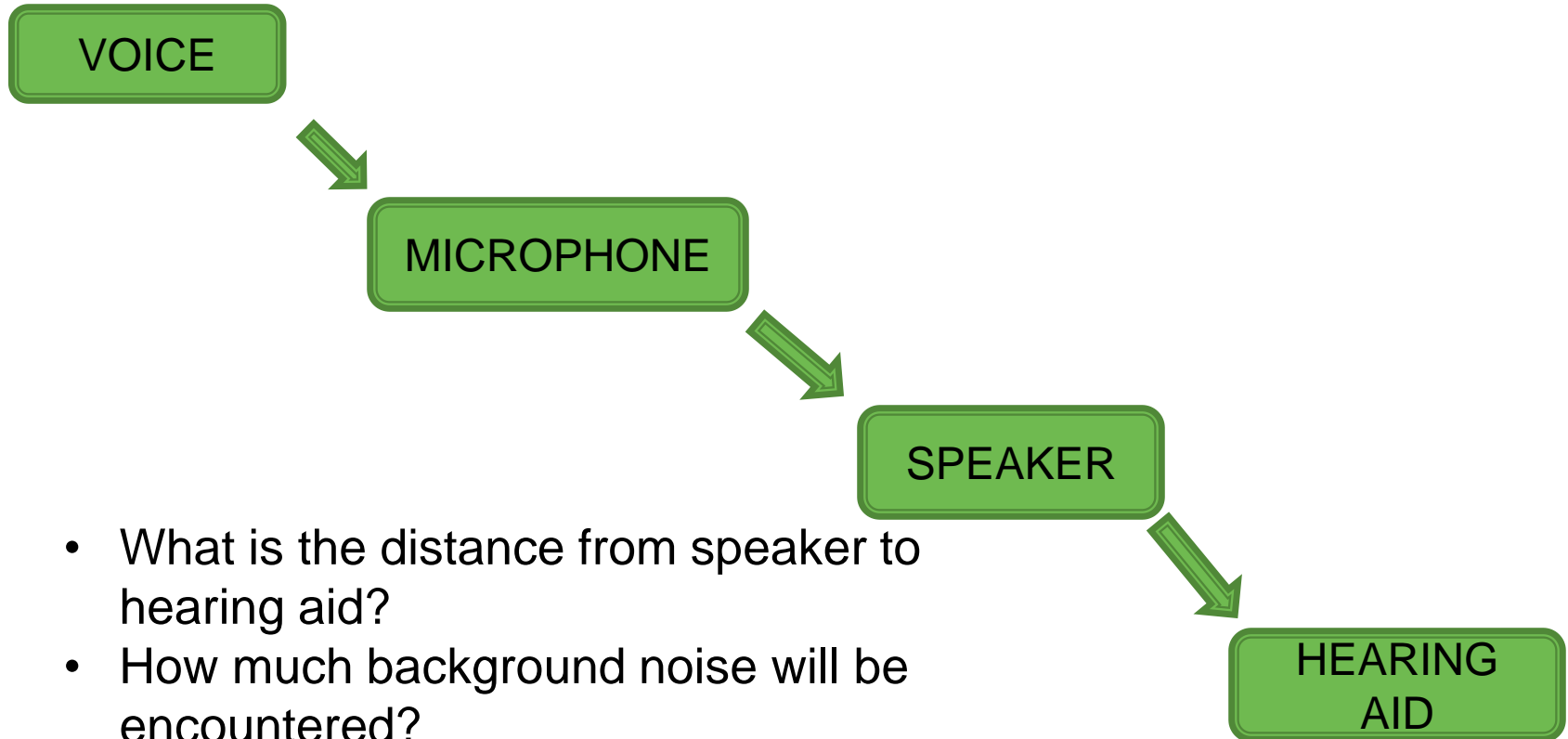
Estimated that 100% affected by hearing loss

- \* Source is Hearing Loss Association of America

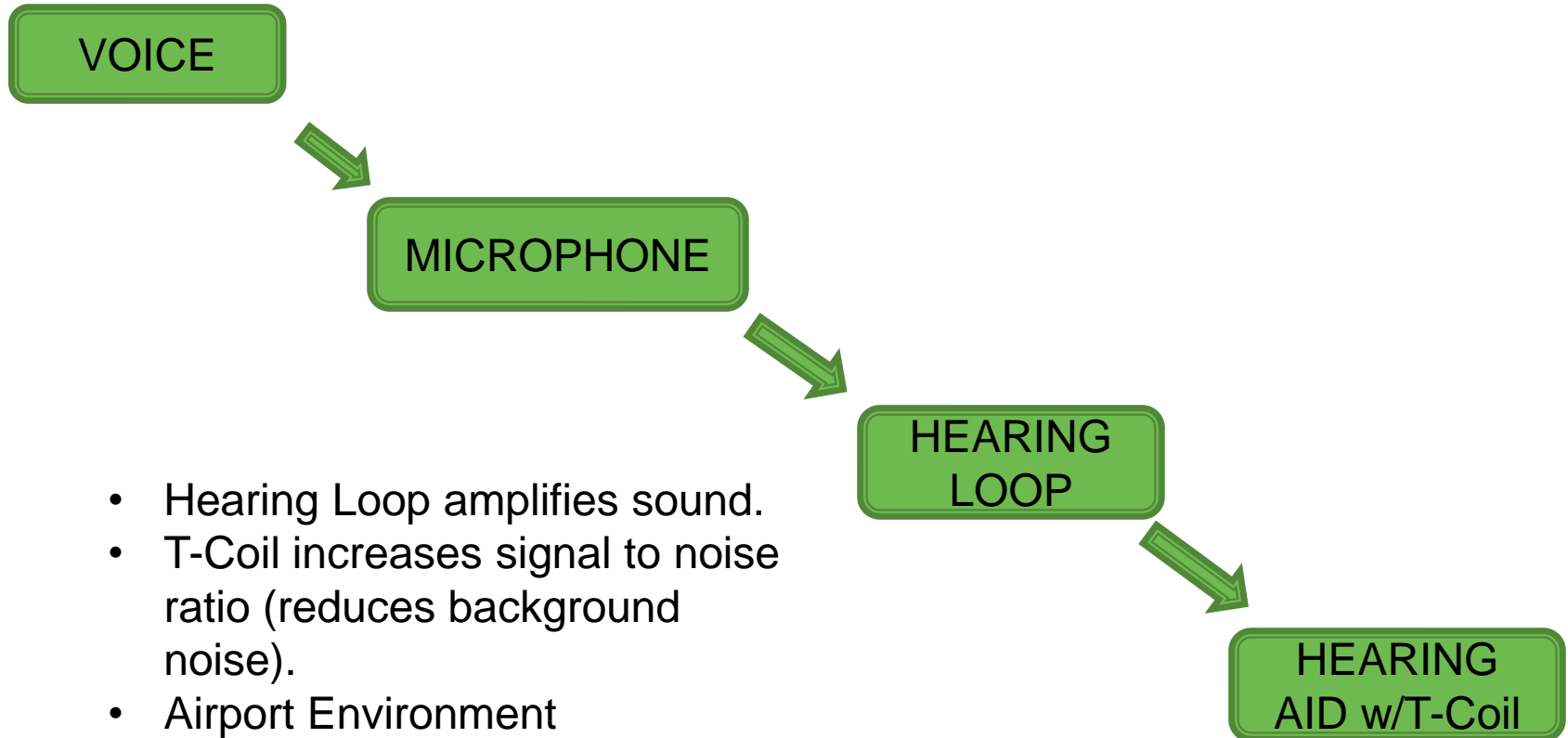
# HEARING DEVICE PERFORMANCE

- ▶ Limited effective range : 6 – 10 feet
- ▶ Make speech louder – do not correct speech understanding difficulties
- ▶ May have difficulty separating speech from background noise

# TYPICAL HEARING DEVICE PROCESS



# T-Coil HEARING DEVICE PROCESS



# AIRPORT ACOUSTICS

- High Ceilings +
- Hard Surfaces +
- Open Space =
- Background Noises





# AIRPORT NOISE

PA System

Flight  
Announcements

Children Playing

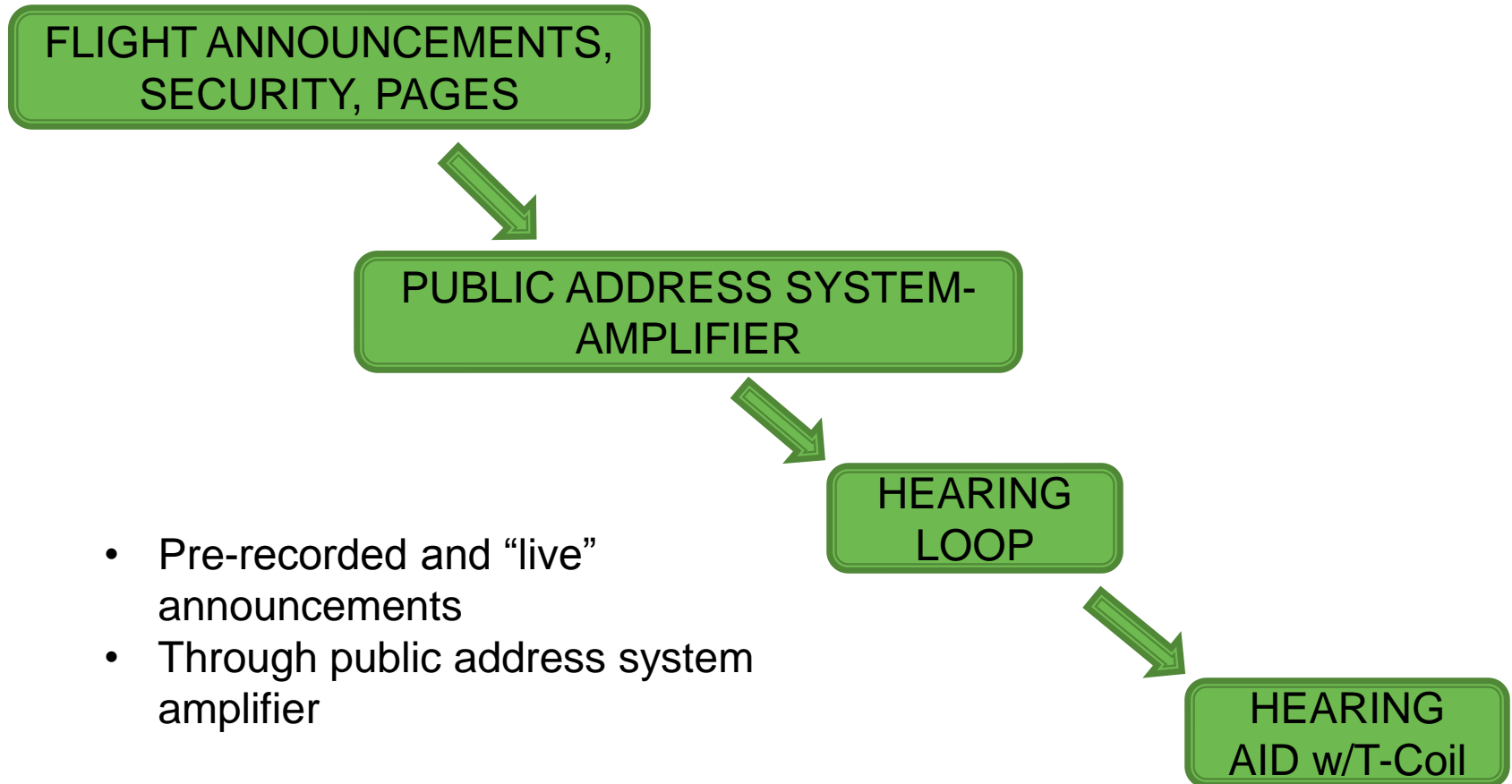
People Talking

Luggage Wheels

Ringling Phones

Courtesy Carts

# PRIORITY ANNOUNCEMENTS

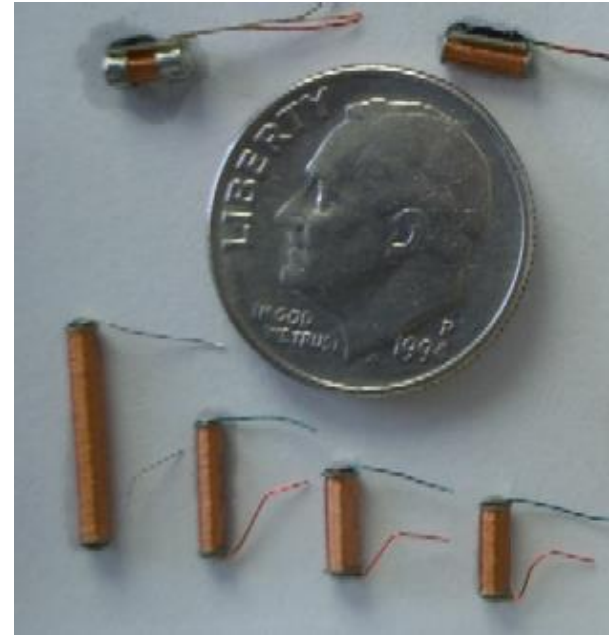




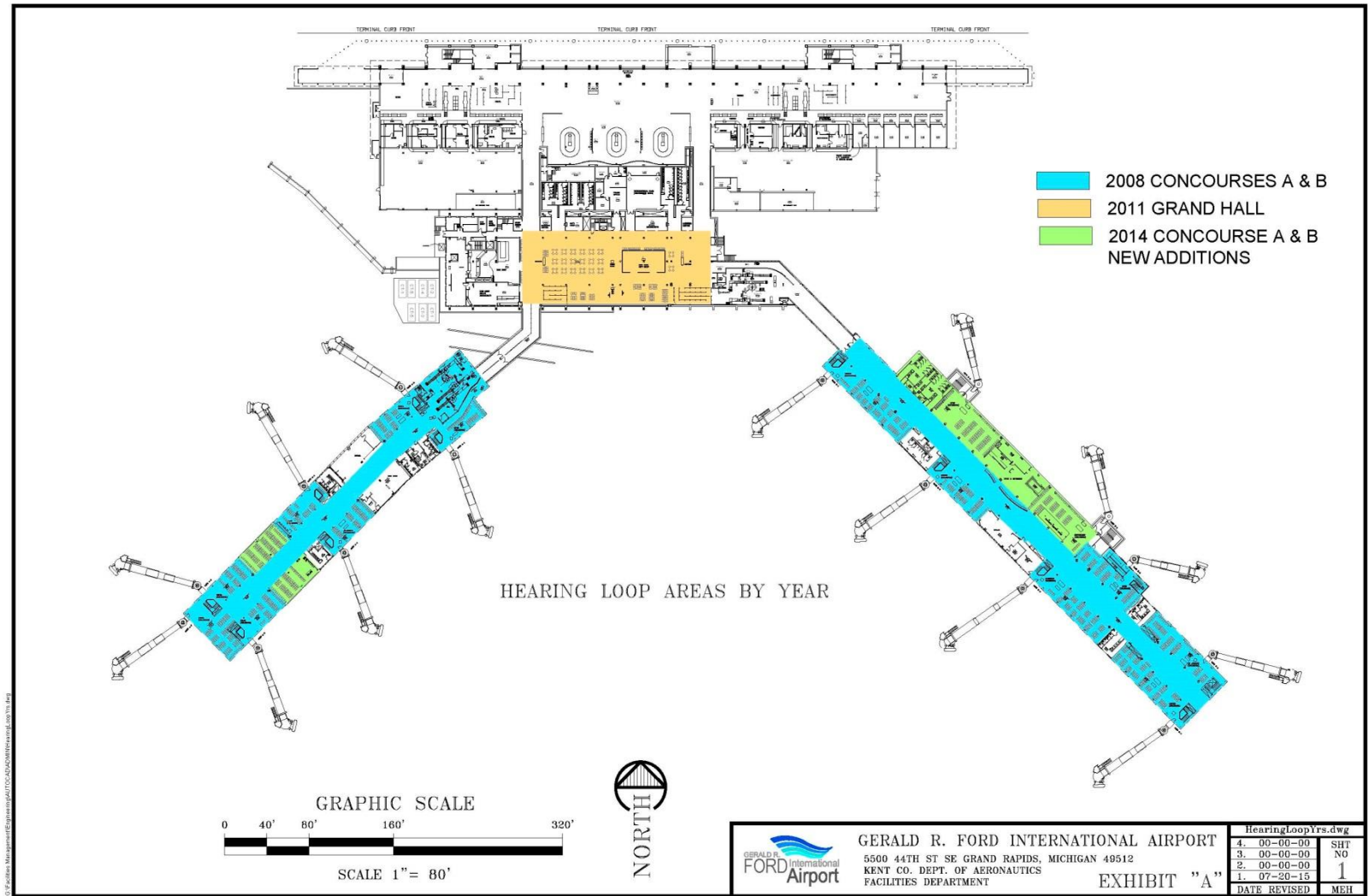
# HEARING AID WITH TELECOIL (T-coil)

T-coil needs to be:

- Manual type
- Vertical orientation
- Properly programmed
- User training



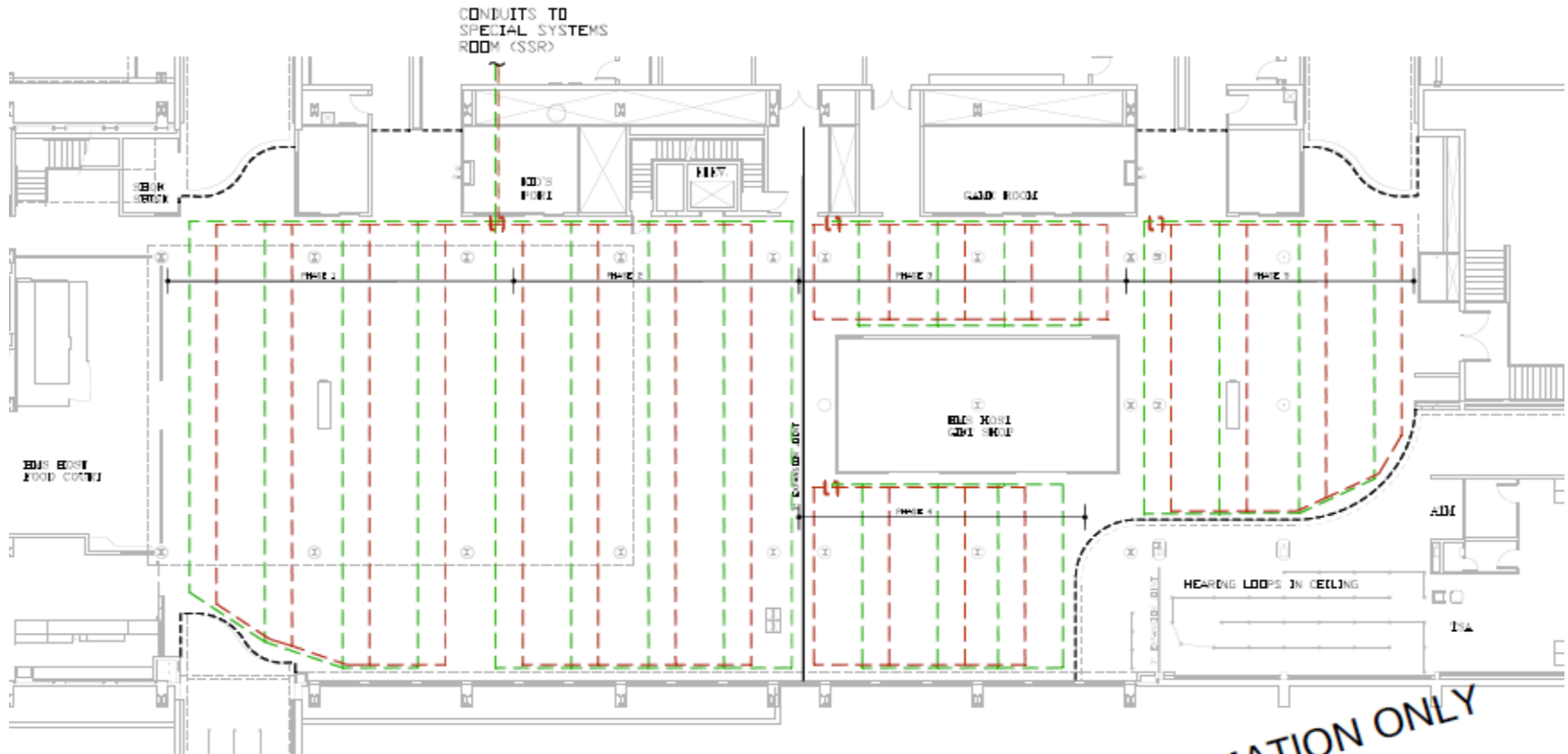
# GRR INSTALLATION PHASES



# BELOW FLOOR INSTALLATION



## 8' – 10' Spacing



## Hearing Loop Installation Phasing

SCALE 1/8" = 1'-0"

INFORMATION ONLY

# INSTALLATION COSTS

- ▶ Phase I – 2008 - \$3.18/s.f.
  - Installed above ceiling
  - Approx. 43,000 s.f.
- ▶ Phase II – 2011 - \$7.72/s.f.
  - Installed prior to carpet replacement
  - Saw cut concrete floor; epoxy filler
  - Night work
  - Approx. 14,200 s.f.
- ▶ Phase III – 2014 - \$2.74/s.f.
  - Installed above ceiling
  - Approx. 12,000 s.f.



# “GET THE WORD OUT”

Signs

Newsletter

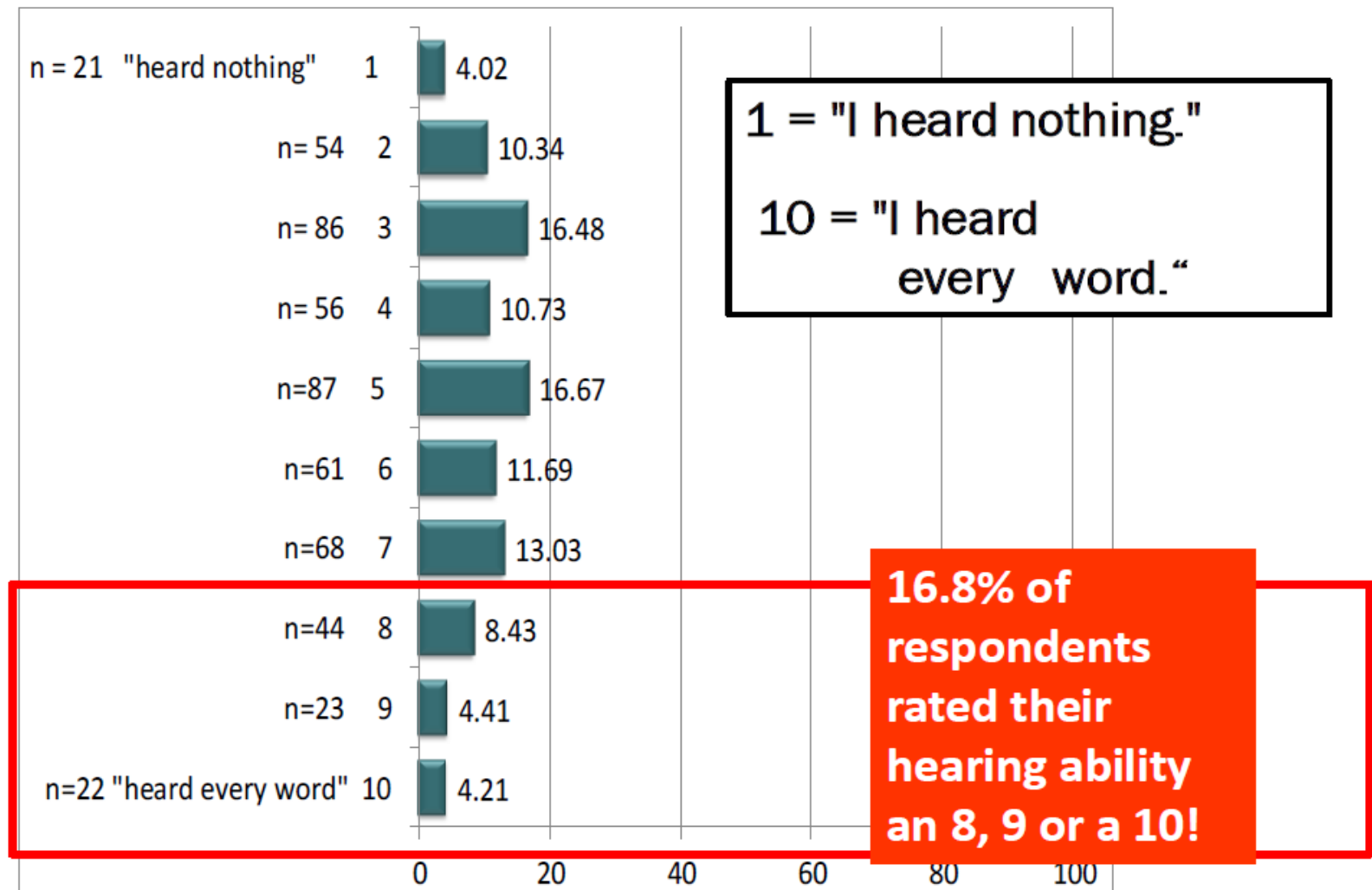
News Release

**Ford International Announces New Hearing Loop System**

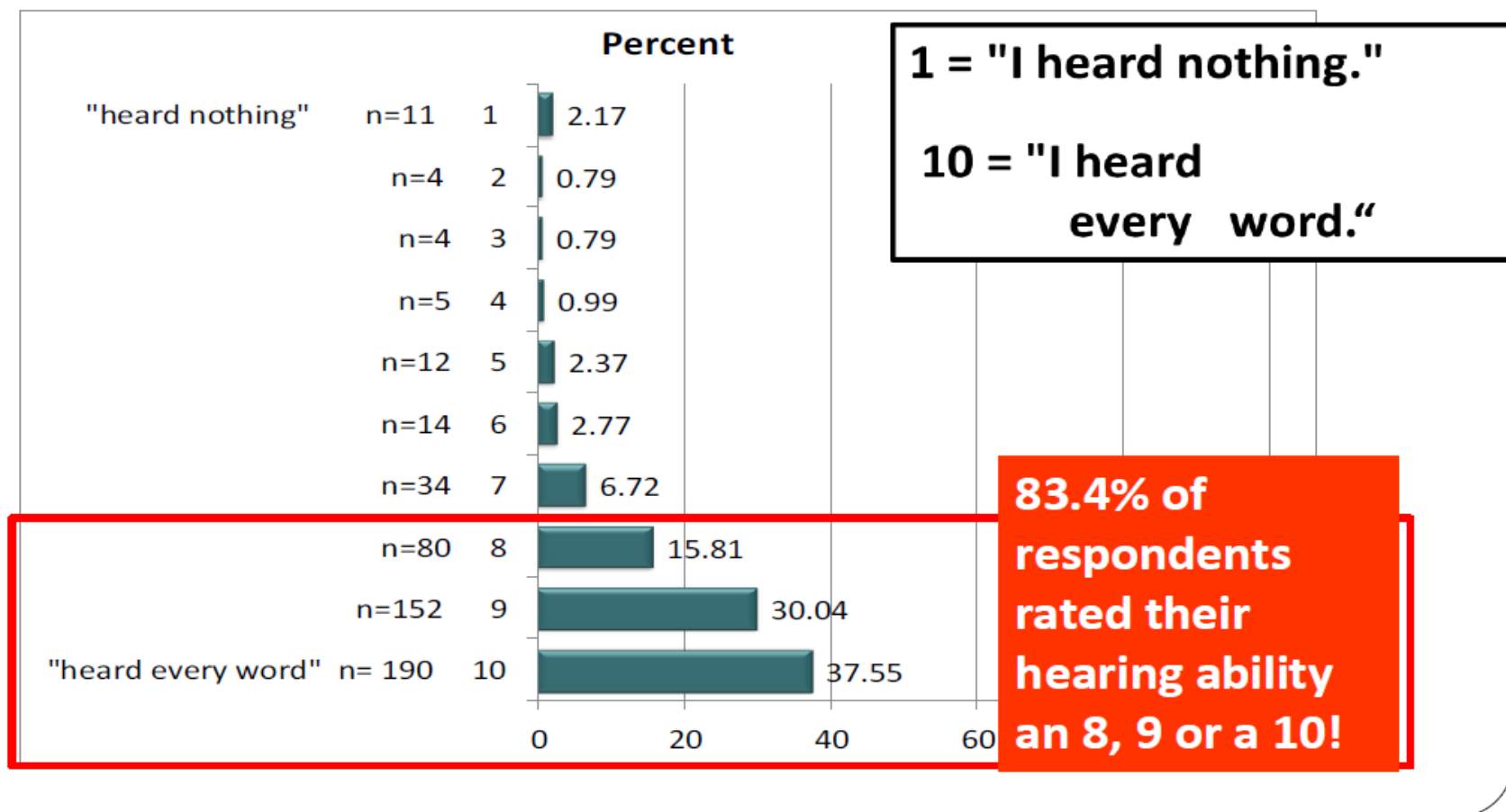
*Facility becomes the only U.S. airport to offer assistive listening system*



# How well did you hear in the venue using your hearing devices only (not using a telecoil)? n=522



How well did you hear in venue using your hearing aids/CIs in the hearing loop (using telecoil or loop listener) n=506



# T-COIL USE IS GROWING

- ▶ All cochlear implants today have T-coils
- ▶ 70% of new hearing aids – that number is rising
- ▶ Hearing Loss Association of America report that 84% of members have T-coils
- ▶ The increase in the use of T-coils will drive the demand for hearing loop systems



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